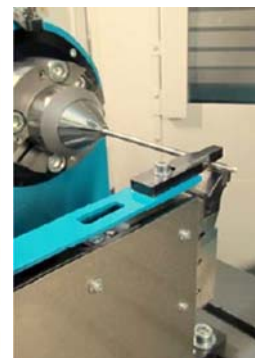





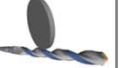
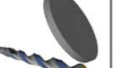







Long HSS Drill Ø3 Z2, Length 300mm

A05-052

Flutegrinding of HSS drills can be done with dressable vitrified wheels, or with standard 1V1 CBN wheels. As the drill diameter is small a steady rest is necessary. Automatic loading cycle by Fanuc Robot.



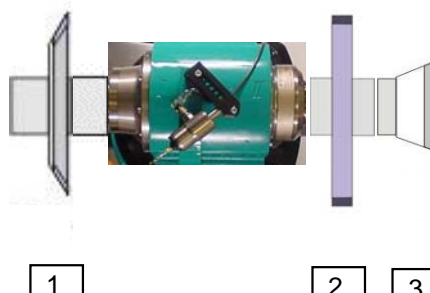
1. Cycletime for Production

Workpiece:	Ø 3 mm, Z 2, Length 300 mm, Length of cutting edge 20mm, Helix angle 32°						
Material HSS							
Operations							
Feed [mm/Min]	2000	1000	100	150	60	80	
Power [kW]		2	2	2	2	2	
Cutting feed [m/s]		42	32	32	32	32	
Used wheels							
Grinding time [s]	6	55	30	45	35	30	36
Total cycle time	3 Min 57						

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

2. Used Grinding Wheels

1	1V1 Ø125 B126
2	1A1 Ø125 B126
3	11V9 Ø75 B126



3. Machine and Software Requirements

Machines: Norma cfg
Control: Fanuc 31i
Accessories: Steady Rest, Robot
Responsible engineer:

Coolant: Synthetic Oil, pressure 11 bar
Software: Quinto 5

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